

## ABSTRACT

An optical receiver for receiving a first input data signal and a second input data signal, the optical receiver comprising: a first photo-detector, the first photo-detector operable to receive the first input data signal and operable to output a first electrical  
5 signal; a second photo-detector, the second photo-detector operable to receive the second input data signal and operable to output a second electrical signal; a phase-locked-loop, the phase-locked-loop operable to receive a reference clock signal; a clock-recovery circuit, the clock-recovery circuit coupled to the phase-locked-loop, the clock-recovery circuit operable to receive the first electrical signal; a latch-decision circuit, the latch-  
10 decision circuit coupled to the clock-recovery circuit; and a latch, the latch coupled to the latch-decision circuit, the latch operable to receive the first electrical signal and the second electrical signal.